REMARKS

Applicant is in receipt of the Office action mailed on July 15, 2004 and thanks Examiner Patel for the detailed examination of the application. Claims 1, 21, 27-31, and 33-45 were rejected. Claims 30, 31 and 45 have been amended, and Claim 46 has been added. By this Amendment, no new matter has been added. Accordingly, claims 1, 21, 27-28, 30-31 and 33-46 remain pending. Favorable consideration is respectfully requested in light of the amendments and the following remarks.

Claim Rejections – 35 U.S.C. § 103

Claims 1, 21, 30, 33 and 34-44 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Hasegawa* (6,062,572) in view of *Zerfass* (DE 3611285 A1). For at least the following reasons, Applicant respectfully traverses the rejection.

All Claimed Limitations are not Taught in *Zerfass* and *Hasegawa*

MPEP Section 2143 sets forth the basic requirements for the Patent and Trademark Office to establish prima facia obviousness, in part, as follows: "the prior art reference (or references when combined) must teach or suggest all the claim limitations." It is well known that "[t]o establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974)." M.P.E.P. § 2143.03. Accord. M.P.E.P. § 706.02(j).

In the office action, the examiner states that *Zerfass* discloses a "filler having particles of grain size in the range of between 5 and 100 micrometer." However, Applicant respectfully submits that *Zerfass* discloses a filler having a maximum particle size of 0.005 millimeters, (5 μm). (See *Zerfass*, column 2, lines 64-65, column 3, lines 15-16, and Claim 7). Therefore, the filler cannot have an average grain size of 80% of the particles in the range of between 0.005 to 0.1 millimeters, as positively recited in independent claims 1, 21, and 44. Accordingly, the Examiner is respectfully requested to **provide a cite** within *Zerfass* that contains the alleged teaching of particles greater than 5 μm.

Proper Combination of *Zerfass* and *Hasegawa*

"A reference may be said to teach away ... if ... the line of development flowing from the reference's disclosure is unlikely to be productive of the result sought by the applicant." *Tec Air Inc. v. Denso Manufacturing Michigan, Inc.*, 52 USPQ2d, 1294 (Fed. Cir. 1999). Applicant submits that the filler size of *Zerfass* combined with the teachings of *Hasegawa* could not result in the claimed invention. Independent claims 1 and 21 recite a filler, "wherein at least 80% of the particles of filler have an average grain size in the range between 5 and 100 μm." The present application teaches that this range of particle sizes results in a "tighter packing of the individual particles and correspondingly higher degrees of filling can be achieved, since smaller particles can fill the spaces between larger particles." Page 5, lines 1-4.

Therefore, the particle sizes of *Zerfass* cannot provide a tight packing of particles with a higher degree of filling. As taught in Applicant's disclosure, the greater the variation in particle sizes, the higher degree of filling, or higher percentage of particles per unit volume. *Zerfass* does not teach this desirable range of particle sizes, and therefore, does not teach the result sought by the applicant.

Dependent Claims

Dependent claims 30 and 33-43 independently teach patentable subject matter, although they are also patentable merely by being dependent on an allowable base claim. As an example, claim 36 recites "wherein the coating is applied in the form of a line of uneven width or height or shape." These limitations are not taught in the prior art of record. Accordingly, Applicant respectfully requests withdrawal of these rejections.

Claims 27-28 and 45 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Hasegawa* (6,062,572) in view of *Zerfass* (DE 3611285 A1), and in further view of *Smith* (5,702,111). For at least the following reasons, Applicant respectfully traverses the rejection.

Applicant notes that the remarks above with respect to claim 1 is equally applicable to these remarks. The following is a partial quote from *Smith*:

> FIG. 2 illustrates the sealant between two surfaces 14 and it will be appreciated that the glass spheres 12 in the sealant are more or less crushed as

> the two surfaces are brought together – there being more spheres crushed between the local "high points" of the two surfaces than between points on the surfaces which are further apart.
>
> As well as the glass spheres, particles of other materials having a relatively high thermal conductivity – e.g. of aluminum – may be incorporated in the matrix material so that the sealant will enhance transfer of heat between surfaces which it contacts.
>
> Column 3, lines 50-60.

At the outset, Applicant respectfully submits that *Smith* does not disclose metallic spheres nor does *Smith* discuss the surface texture of metallic particles.

Proper Combination of Smith and References

If the prior art device were rendered unsuitable for its intended purpose, the proposed combination would not establish a prima-facie case of obviousness. *In re Gordon et al*, 221 USPQ 1125 (Fed. Cir. 1984). A close reading of the first paragraph quoted above reveals that the only spheres that *Smith* discloses are crushable ("hollow", column 3, line 27) glass spheres 12. The purpose of these hollow spheres is for at least a portion thereof to crush thereby allowing portions of the sealant to conform to a mating surface.

Applicant submits that combining the hollow glass spheres of *Smith* (the only spheres taught) with either *Hasegawa* or *Zerfass* would render these gaskets unsuitable for their intended purpose as the spheres are crushed. The abstract of *Hasegawa* teaches "a coating layer having a property of high load resistance." (emphasis added) The abstract of *Zerfass* teaches that the filler "facilitates high strength." (See attached English translation) Thus, the addition of hollow glass spheres that are intended to crush when a gasket is compressed would lower the load resistance and strength of a gasket, and therefore teach away from the claimed invention and render the references to be modified unsuitable for their intended purposes.

Particles are not Taught in Smith as Spherical

Prior art references must be taken in their entirety for all that they teach. W. *L. Gore and Associates, Inc.*, 220 USPQ 303, at 312 (Fed. Cir. 1983). Reading the quoted passage further, *Smith* also discloses that materials having a relatively high thermal conductivity may

also be incorporated into the sealant. *Smith* teaches that the purpose of the metallic particles is to enhance thermal transfer, and not as a filler, as positivcly recited in independent claims 1 and 45. *Smith* teaches the hollow glass spheres (12) and the particles as separate items with separate functions and purposes. Interestingly, *Smith* does not teach that these particles are spherical or have a smooth, rounded surface as positively recited in the rejected claims. Indeed, these particles are not claimed, mentioned in any other passage, or illustrated in any drawing in *Smith*.

The Examiner states that "Smith discloses a filer (sic) in a member to be spherical in shape (12) and the filler can be made of aluminum." Contrary to this assertion, *Smith* does not teach a filler as defined in the present application. Also, as noted above, *Smith* teaches the hollow glass spheres (12) and the particles as separate items with separate functions and purposes. Therefore a passing reference in *Smith* of "particles" in the same sentence as the hollow glass spheres cannot be taken to mean that the particles are spherical or have a smooth, rounded surface since the particles and spheres are presented as two distinctly different items. Therefore, *Smith* cannot be taken as a teaching of aluminum spheres.

It should be further noted that the rectangular "projections 20" of FIGS. 3 and 4 of *Smith* are aluminum. (See column 4, lines 3-15) These projections, however, are also not taught as being spherical or having a smooth, rounded surface.

Additionally, claim 45 has been amended to include the limitation "wherein said coating has a glass transition temperature of greater than about 302°F (150°C)." In suppport of this amendment, Applicant directs Examiners attention to page 5, lines 24-32. Applicant notes that the prior art of record does not teach this limitation.

Accordingly, Applicant respectfully requests withdrawal of the rejection to claims 27, 28, and 45.

Claims 31 is rejected under 35 U.S.C. § 103(a) as being unpatentable over *Hasegawa* (6,062,572) in view of *Zerfass* (DE 3611285 A1) and in further view of *Mitchell et al* (6,211,458). For at least the following reasons, Applicant respectfully traverses the rejection.

The Examiner states in paragraph 4 of the Office Action that "Mitchell discloses a gasket or seal that has a filler that are copper, nickel, aluminum, tin or tin alloy (column 6, lines 18-19)." The correct quote from *Mitchell* is "copper, nickel, silver, aluminum, tin or an alloy such as Monel." *Mitchell* does not teach any alloys other than Monel. Applicant notes that Monel is an alloy of copper and nickel, and not a tin alloy. At any rate, *Mitchell* does not disclose "a copper and tin alloy," as positively recited in Claim 31, even if the Examiner were correct in the assertion that *Mitchell* teaches a tin alloy.

Therefore, since Mitchell does not teach a copper and tin alloy, Claim 31 is not rendered obvious in light of the prior art of record. Accordingly, Applicant respectfully requests withdrawal of the rejection to claim 31.

Claims 30 and 31

Applicant notes that Claim 30 has been amended to more clearly point out an embodiment of the claimed invention as described on page 5, lines 5-8. Additionally, claim 31 has been amended to correct a typographical error. New claim 46 includes limitations not taught in the prior art of record, and is therefore allowable

CONCLUSION

In view of the above amendment and remarks, the pending application is in condition for allowance. If, however, there are any outstanding issues that can be resolved by telephone conference, the Examiner is earnestly encouraged to telephone the undersigned representative.

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 18-0013, under Order No. 60680-1562 from which the undersigned is authorized to draw.

Dated: January 18, 2005
The 15th falling on Saturday and the 17th a holiday

Respectfully submitted,

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Attachment – esp@cenet printout of DE 36 11 285 Abstract in English

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